Introduction

Welcome to:

The ONLY program available that allows you to play AND mix .MP3 files!

What is Virtual Turntables (VTT)?

Virtual Turntables is the ONLY program available that allows you to **play and mix MP3s**!   With nothing more than your home computer and a hard drive full of MP3s, you'll be creating professional sounding mixes in no time!   No expensive mixing boards and turntables, no expensive and delicate LPs/CDs, no knobs and dials, no painstaking pitch matching.. Just you, your computer, your MP3s, and your imagination.

Before, in order to break into the DJing business, you needed several things:
1) A collection of space consuming and HEAVY records...   A small fortune in itself.
2) Expensive equipment including faders and turntables (upwards of $300 EACH)
3) Weeks of practice to learn skills such as beat counting and pitch matching

With VTT, you need NONE of the above.

With **MP3 support**, VTT allows you to mix almost anything...   Instantly!   Techno/Dance, Rap, R&B, Alternative, Rock...   All genres of music are available in MP3 format, all of which are readily available for download from the net(*).   No need to purchase both the CD and the LP just to mix with the latest songs...   If you own the song in one form or another, you can mix it!

VTT includes a feature complete multi-channel "virtual" mixer board.   Modeled after real mixer boards, the VTT mixer provides a clean and intuitive interface to access its *unlimited* number of available channels.   Use its **channel fader** to slowly move from song to song or its built in **special effects** to *backspin* and *scratch* into a transition. **Adjust volume** to get the perfect balance, or use the **headphone channel selector** to monitor one or several specific channels at a time.   All you need is VTT and an inexpensive adaptor (the Audio doohicky) that costs less than $10 dollars to purchase at Radio Shack.

Manual pitch matching is now a relic of the past.   VTT features a virtually **automatic pitch matching system**.   When you first load up a song, you simply count out the rhythm with the space bar and VTT calculates the song's Beats Per Minute(BPM) by itself.   With this information, VTT has the ability to quickly and accurately pitch match any two songs!   Simply select a source and destination song, and click a button...   VOILA!   An instant match that will hold steady for typically around 10 seconds.   Best of all, it saves this information and recalls it the next time you load the song.

Finally, VTT supports features that conventional mixers and turntables don't support.   One such feature is a **song position memory**, capable of storing up to 10 positions.   This enables VTT to not only remember certain places in a song, but makes easy sampling one step closer!

With its easy to use interface and multitude of features, Virtual Turntables is the perfect piece of software for the mix maker, hobbyist, or professional DJ.

System Requirements and Features

System Requirements
- Pentium 166 or higher
- 32 Megs of RAM or greater
- Windows compatible sound card (if it works with Windows, it works with VTT)
- DirectX Version 5.0 or greater
- An Audio doohicky - RECOMMENDED but not required

Features
- CD Quality sound with MP3 and WAV files
- A fully functional mixer board that features volume sliders, a fader bar, and headphone selector
- Adjustable pitch with ANY song you load
- Pitch bending
- Automatic pitch matching
- Built in sample looping
- User definable special effects such as backspin and scratching
- Position marking, for easy sampling and looping
- "Smart Songs" which remember all their settings between uses
- An unlimited number of mixable channels limited only by your system's power and resources

Update history

Version 1.70
- Lots of stuff, but I'm too lazy to update this HELP file.   Hopefully it'll be updated soon. =)

Version 1.10
- Added the ability to have an **unlimited number of SFX**, each having its own user defined hotkey and adjustable volume.
- A new <u>Pitch bend</u> for easier pitch matching
- Shows the playtime elapsed OR the playtime remaining (click on the time display)
- You can now type in the BPM instead of having VTT calculate it
- Option to disable headphones, and have stereo output on both speakers
- Stereo sound (as opposed to only the left channel) in headphone/speaker mode
- Display now shows the specified time at a position while the user is dragging the positioning bar
- Added support for <u>looping</u> (sampling).
- BUG FIXES GALORE!   Should crash a whole lot less.   May even fix some skipping problems on systems.

<u>Upcoming (starting from most likely to appear in next version to stuff for later)</u>
- Support for multiple sound cards (I gotta get myself another soundcard...   I'm out of PCI slots!   Ack!)
- Playlists
- Automatic mixing (with playlists)
- Buffering from CD to disk
- WinAmp DSP effects
- DLL Module interface (for plug in modules like MODs/S3Ms and stuff)
- Equalizer
- Save directly to .wav or .mp3 format
- INTERFACE OVERHAUL (this may happen sooner)

Introduction to the tutorial

In order for VTT to work correctly, you need to buy a small adaptor device that connects to your sound card via headphone jacks.   Click here for more information on purchasing.   Click here for information on connecting this device.

You also need DirectX Version 5.0.   Click here for downloading information.

Welcome to the Step by Step guide to using Virtual Turntables.   Here, you will learn the basic features of VTT, as well as the advanced one.

Along the way, you will be treated to screen shots of the individual tasks, which should be enough to explain the general feature, and its uses.   If you have any further questions about the material, you can refer to the manual section of this help document.

Also, each section may be followed by a "DJing Tip"   These are just preliminary tips that I've learned along the way.   Keep in mind, however, that these tips and steps are NOT DESIGNED as a full fledged tutorial on the Art of DJing.   To learn better DJing techniques, check out Tips And Techniques of a Real DJ also present in this help file.

In order to advance through this tutorial, you should click on the >> button located at the top of this window.   If you ever want to backtrack, click on the << button or the button labeled back.

In any case, good luck!   And onto your first lesson!

Oh, and remember, this tutorial assumes you have the optional example songs.   You can download them from Carrot Innovation's web page.   If you don't have them, that's ok too, you can follow the same steps with any song.

Please turn page at the tone....   *BEEP*

Step 1: Loading a device (WAV or MP3 file)

To load a device:

1. click on File, then drag to the open command

You will then be presented with a dialog box containing a list of all the files in the current directory.

2. Select the file **"DS-ALOOF.MP3"** then click ok.

That's it!   You should now your first device open.

Step 2: Using the Device panel

Once you have opened a file, a dialog box that looks like the following should pop up.   It is the **Device Panel**:
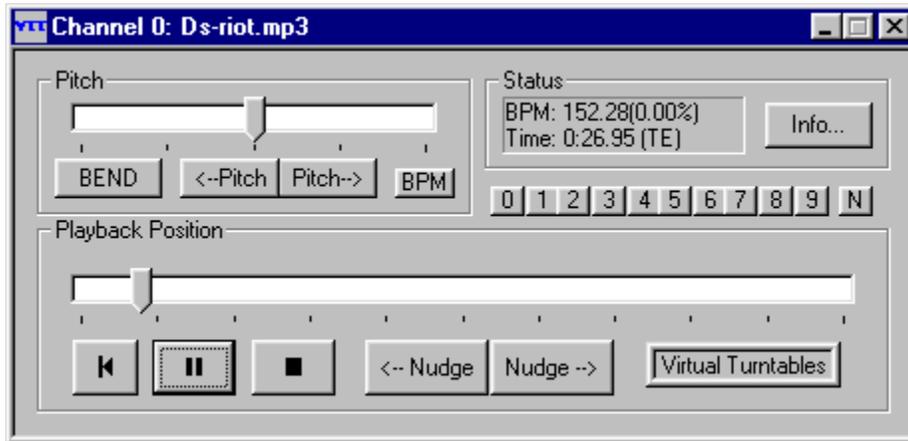
The device panel is very much like that of a tape recorder or a CD player, with buttons that operate similarly.

Play/Pause/Stop

- To begin **playing** the file, click on the [▶] button.   It should turn into a || button.

- If you wish to **pause** playback, [||] click .

- If you wish to **stop** playback, and reset the position to the beginning click [■]

- If you want to **reset/rewind** the position to the beginning WITHOUT stopping, click on [|◀]

NOTE: Each of the above actions occur   when you RELEASE THE BUTTON.   They DON'T occur when you first press the button.   Don't blame me for this.   That's how Windows works

Positioning
Position is very easily controlled with the "Playback position" scroll bar.   You can change the position to wherever you'd like in the file by simply clicking on the wedge shaped graphic and dragging.   If you are using MP3 files, and have a slower computer, this may take a second or two.

Pitch
Finally, we have the pitch control.   Fool around with it and see what happens.

Channel Number
You should also notice about the dialog is that it's given a unique **channel number**.   Each time you open a device, a channel number is assigned.   This number is used by the Mixer panel to identify devices, and change attributes such as volume and fade %.   But, more on this later.

Step 3: Your first mixing attempt

Well, you've now learned how to start, stop, pause and position a single wave device.   Can't do much mixing with just one song, so let's open a second.

1. Keeping the current song open, follow Step 1 again to open the file "DS-RIOT.MP3".
2. Start your first song playing by clicking on the play button
3. Click on your second song, and click the play button

You now have two songs open and playing at the same time.   Doesn't sound too great, I know.   Let's see if we can fix that in our next section.

Step 4a: Using the Mixer panel - The Fader

Your mixer panel should look something like this
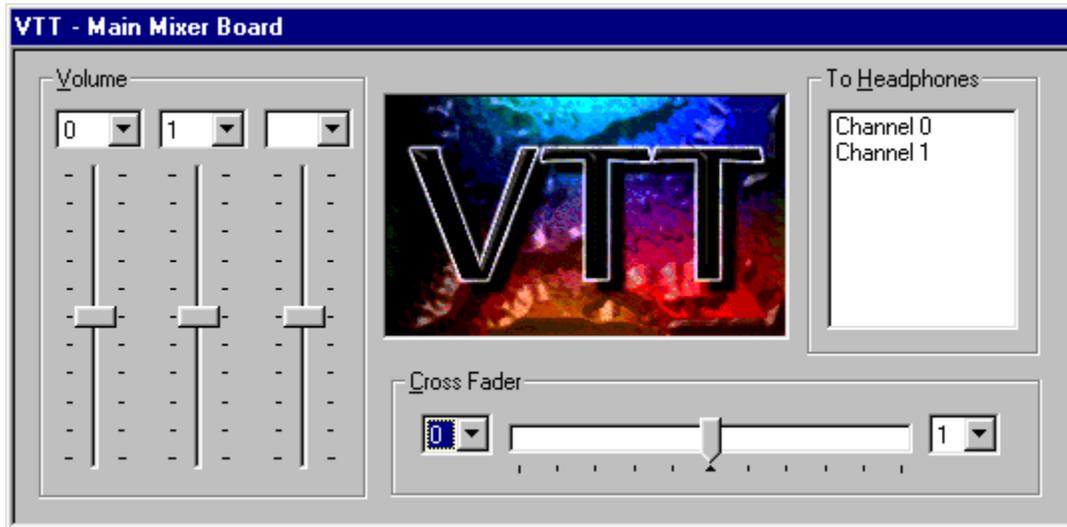
Using the fader
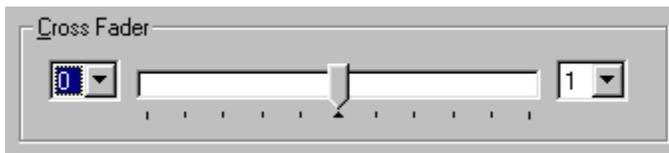
Probably the most important feature of the Mixer is the Fader.   And what exactly does a fader do?   Try the following

1. Make sure that both your devices you opened earlier are playing, and the fader is positioned in the middle
2. Move the fader to the left SLOWLY

As you **move the fader to the left**, you'll notice that the **song on channel 1 (DS-RIOT) gets softer**.   If you continue moving it until it is all the way left, you won't be able to hear it anymore.

The opposite happens when you **move the fader to the right**.   When you move right, the **song on channel 0 (DS-ALOOF) gets softer**.

The channel that the slider is closer too is ALWAYS at full volume while the other gets softer.

Changing fader channels
By changing the numbers in the boxes to the left and right of the slider, you can control which channels get faded.   Try the following:

1. On the left box, change the number from 1 to 0
2. On the right side, change the number from 0 to 1

What you've just done is reassign the fader channels.   Now, if your slider is all the way to the left, you will hear ONLY the song on device 1 and if you move the slider to the right, you will hear ONLY the song on device 0.

Step 4b: Using the Mixer panel - Volume control
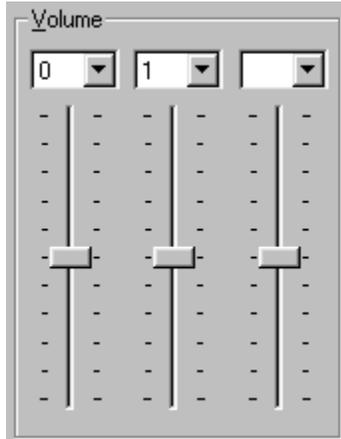
Use of the volume controls is fairly straightforward.

The channel affected by each slider is shown in the box above that slider.   Right now, you should have channel 0 in the first box, and channel 1 in the next.

The default position of all devices is in the middle... The 100% mark.   If you move it **up, it gets louder.** When you move it **down, it gets softer**

Play around with the volumes.   Not too hard right?

NOTE: When the volume is beyond the 100% mark, there will usually be a delay period between the time you move the volume, and when the action actually occurs.   This is a bug of sorts, caused by the way buffering is implemented.   As of yet I can't think of a feasible way to get rid of it.   Future versions may correct this fault.

Step 4c: Using the Mixer panel - Headphone control

If you look in the "headphone" area of the Mixer Panel, you'll notice that it mentions that there are two channels open.   As presented in step 2, each channel represents a device.   If you happen to forget which channel maps to which device, just look back at your two device windows...   They're given in that window's title area.

Now, put on your headphones (you need the Audio doohicky for this) and do the following

1. Make sure both devices are playing once more
2. Click on "Channel 0"
3. Click on "Channel 1"
4. Move the fader back and forth between Channel 0 and 1

Before clicking on any Channel, your headphones should have been silent, despite what you hear on the speakers.   When you clicked on Channel 0, you should have been able to hear ONLY Channel 0 through the headphones.   When you clicked on Channel 1, you should have been able to hear both Channel 0 and Channel 1.   Notice, that the audio you hear through the headphones is NOT affected by the fader

DJing Tip
This ability to turn channels on and off in the headphone set is called queuing.   When mixing songs, most DJs like to que up their next song before the previous song is done playing.   In this manner, the current song can continue to play over the loud speakers, while the DJ previews the next song over his headphones.   Previewing allows the DJ to correctly pitch match, set up volumes, and most importantly of all, look for good entry points.

Step 5: Your second mixing attempt

With the knowledge of fading under your belt, let's try a little more graceful mixing.

1. Reset both songs to their start (Either click on STOP or the REWIND button)
2. Make sure that *channel 0* is selected on the left, and *channel 1* is selected on the right
3. Move the fader all the way to the left
4. Now start *channel 0* playing
5. When you feel like it (sounds better if it's toward the end of a song), start *channel 1* playing
6. Slowly move the fader from left to right

This should have been a fairly smooth transition, with each song flowing from one to another.   Still sounding pretty ugly, but a lot better than having both going full blast for a long period of time.

We'll make these two flow together a LOT better in the next couple of steps

DJing Tip
Although this didn't sound too hot with these two techno songs, it works a lot better with slow songs. Fading from one slow song to the next is a great way to form a transition, and maybe even sweep a girl off her feet!

Step 6: Pitch matching - Introduction

In order to get a smooth and professional sounding transition between these two techno songs, we have to do something called **pitch matching**.

If you listen to each song, you'll notice that each has a steady rhythm/beat, usually kept up by the percussion.   You'll also notice that this beat is kept constant through the entire song.   The number of beats that occur in a minute is called the **Beats Per Minute** or **BPM**.

The goal of pitch matching is to get both songs, in this case channel 0 and 1, to have the same BPM.

So, our first goal should be counting BPMs

Step 6a: Pitch matching - Beat counting

With VTT, beat counting is extremely easy.   We'll start with channel 0.

1. Stop channel 1, and make sure channel 0 is currently playing
2. On channel 0, click BPM.   You should end up with something that looks like this
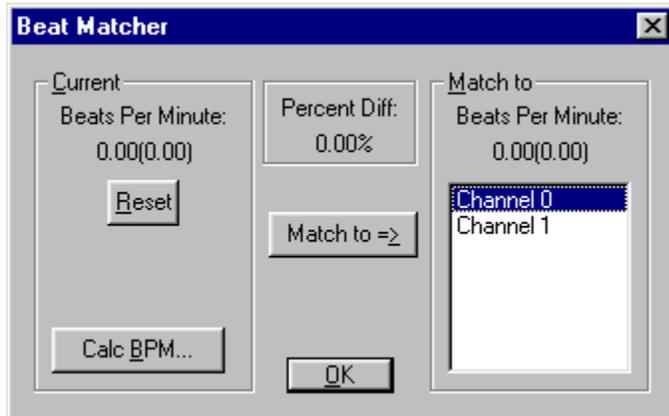
3. Click on the RECALC button.   You should now have a screen like this
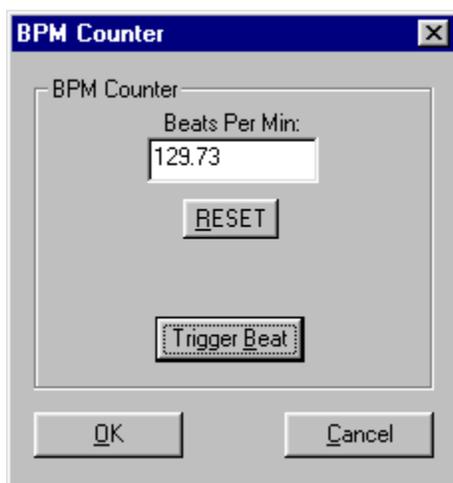
4. Whenever you hear a beat in the song, hit the "B" key or click the mouse button on "Trigger Beat".   I'd advise hitting B since it's a tad more accurate then using the mouse.
5. If you ever make a mistake, click the **RESET** button to set the counter back to 0

Notice whenever you hit the B key, the BPM changes?   Keep hitting the B key until the BPM stabilizes at a nice whole number (should be around *131 BPM*).   The fractional part will continue to change, but if the whole part doesn't change for about 5 or 6 seconds, you're fine.

If you're having trouble counting the beats, try "feeling" the beat.   Yes, this sounds corny, but it really works quite well.

6. Once finished, close this window.   The BPM that you just "tapped" out should now show up under the "Dest" BPM listing
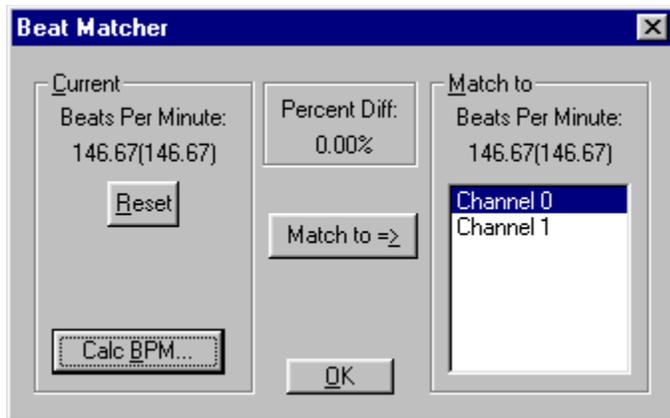
7. Close this window as well
8. Repeat the above procedure with channel 1

A neat little feature of VTT is that it will remember each songs BPMs.   So next time you load up VTT and load up either of these songs, your BPMs will already be configured for you!

Now that you have BPM matching under your belt, lets get into the juicy stuff

Step 6b: Pitch matching - The matching!

Once you have found BPMs for both channel 0 and channel 1, its time to pitch match.

What we'll be doing here is pitch matching channel 1, to channel 0.   In other words, we want channel 1 to have the same BPM as channel 0

In order to accomplish this, we need to be able to speed up or slow down channel 1 so their BPMs match. The only way to do this is to adjust channel 1s pitch, since reducing or raising the pitch slows or speeds up the song respectively.

Without VTT, this would be extremely hard for you'd have to do the pitch matching/adjusting manually and mostly by ear (not to say you can't do it...   DJs are REALLY good at it).   With VTT however, this becomes basically a 3 click process.

Do the following:

1. On channel 1, once again click on BPM.   This time, however, don't click on recalc.
2. Under channels, click channel 0
3. Click on MATCH TO =>
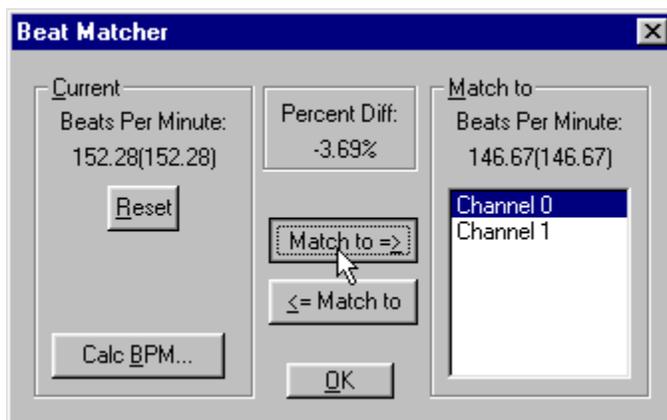
4. Percent Diff should now go down to 0.   If it isn't, keep clicking until it does.

Voila!   That's it!   The two are now pitch matched and ready to go.

Step 7: Catching a beat

Ok, we're almost there.   Both songs are now at the same tempo, but we can't just start playing the two songs.   We want the beats to coincide with each other.   If they don't coincide with each other, you'll notice something kinda like an echo between the two drums.   You'll hear one drum, then the other a little bit after.   By **catching a beat**, we try to eliminate this.

We typically want to catch a beat on the **down beat** of a song.   What is the down beat?   If you listen carefully, you'll notice that a song can be "divided" up into series of beats, usually 8 or 16.   The first beat of each series is referred to as the **down beat**.

With this term defined, let's catch it!   We'll be catching a beat on channel 1:

1. Start playing **channel 1** from the beginning
2. Once the song begins, and you hear the beat in the background, wait until a down beat is about to occur, and pause the song (catch the beat) right before it occurs

If you've done it correctly, once you hit play again, the first thing you should hear is that downbeat.   Don't feel bad if you don't, however.   This is one part of VTT that actually requires some practice.

A good technique to catch the beat effectively is to

1. Check the downbeat
2. Adjust the position slightly using the NUDGE buttons.   This will move the position slightly left or right
3. Save this position by holding down CTRL and clicking 0.   See Stored Positions for more info
4. Check the downbeat
5. Restore your old position by clicking on 0 WITHOUT holding down CTRL
6. Go to step 2

By doing this, you're almost guaranteed to get a good catch.

Don't forget that actions take place AFTER you've released the mouse button.   A good technique is to click down the pause button a second or two before you do the catching and catch the beat by simply releasing the mouse button.

Now, onto the final step...   The actual mix!

Step 8: Your third (and final) mixing attempt

Its time to put it all together.   By now you should have the following done:

1) Have channel 1 matched to channel 0
2) Caught the beat for channel 1

With these two steps out of the way, we're ready to begin.

1. Set the left fader channel selector to 0, and the right selector to 1
2. Move the fader TO THE MIDDLE
3. Reset channel 0 to its starting position and begin playing
4. Make sure channel 1 is positioned right before the downbeat (the position after catching the beat)
5. Wait for channel 1 to get to its downbeat...
6. When channel 1 reaches its downbeat, release channel 0 so BOTH channel 0 and channel 1 have their
   downbeats at the SAME TIME

If you were successful, there should be no "echo" from the drums and you have your first successful mix.
If not, try again!

Typically, this match will only last a couple of seconds.   After a while, you'll gradually hear the "echo"
come in due to slight inaccuracies.   You can correct this by using the pitch bend feature.   In order for
them to hold longer, you'll have to make some adjustments to the pitch manually.

Keep in mind that this takes a good amount of practice.   It typically takes a novice user 10-20 tries to get
a good feeling for the timing.

Well, that's it.   You've made your first successful match, and now you're ready to DJ like mad right?
Well sure, you can, but if you want to be REALLY good, I'd check out the Tips and Techniques of a real
DJ section.   It will give you some great tips, some good techniques, and the chicks dig it.

Introduction

This section could not be finished at the time this product shipped.   It will be made available on our <u>web site</u> as soon as its finished!

Thanks for the interest!

Introduction and Clickable picture
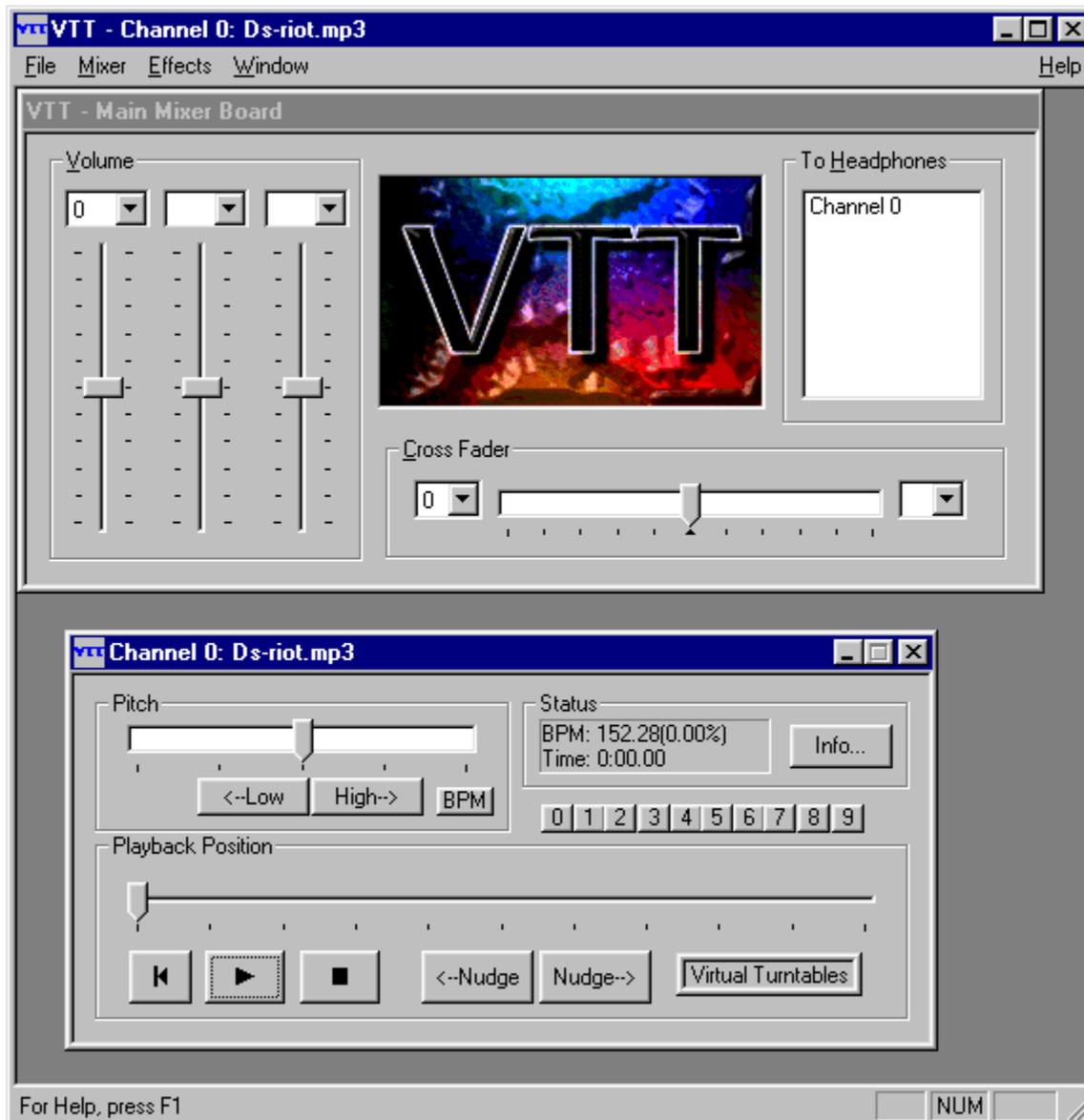
To get help on an item, click that item on the picture above or select from the following categories:

File Menu
Mixer Menu
Device Menu
Sound FX Menu
Windows Menu
Help Menu

The Mixer Panel
The Device Panel

File Menu

The File menu offers the following commands:

<u>Open</u>
   Opens an existing song and loads it into a device
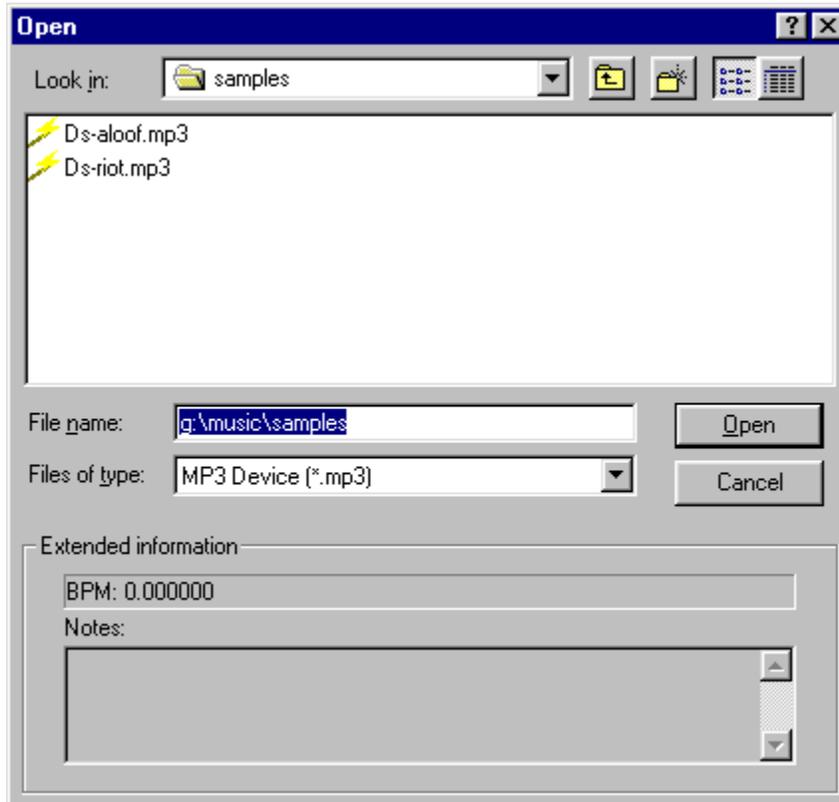
<u>Close</u>
   Closes an existing device.

   WARNING: If you select CLOSE while the Mixer Panel is currently selected, this will close down VTT. Due to strange programming practices for Microsoft, you can't seem to prevent a Window from closing (unlike in Borland)

<u>Recently opened file list</u>
   Use these files to rapidly open a file that was loaded previously

<u>Exit</u>
   Exits VTT.   But why would you ever want to leave?

Mixer Menu

The Mixer Menu offers the following commands:

Cross Fader:
Use these commands to control the fader on the Mixer Panel.

By using these numbers, you're able to quickly control where the fader is.

Mixer Settings:
The options presented under this menu effect the overall sound of VTT.   Here, you can select which soundcard you'd like assigned to each channel.   As of now (Version 1.1) you have a choice of only 2 outputs - Speaker output and Headphone output.

By selecting "Primary" under Speaker output, you should be able to get stereo sound out of both speakers, but at the same time this shuts off your headphone output.

If you select "Primary - left Channel", this enables headphone output.   The only drawback to this is that the "output stuff" goes only to the left channel.   Headphone output goes to the right.   You only get mono sound.

Device settings:
Look here for more information

Device Menu

The Device Menu offers the following commands:

DSP Effects:
   NOT YET IMPLEMENTED

Settings:
   Currently, the only thing you can change is the timing method VTT uses.

   Multimedia Timer - This is the method VTT Version 1.00 used.   It's provided here for backward compatibility.   It's generally advised that you NOT use this method due to more processing overhead (it does not include some features thread timing has)

   Thread Timer - This method is the default setting.   Using this method, you'll generally get slightly better performance out of VTT (you may not feel it, or see it, but its there... Trust me. =))

Sound FX Menu

The Effects Menu offers the following commands:

<u>Settings</u>
   Selects and adds sounds.

   Note: VTT plays effects on BOTH channels... Headphone and output.   Be aware of this

Windows Menu

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

New Window
    Use this command to open a new window with the same contents as the active window.   You can open multiple document windows to display different parts or views of a document at the same time.   If you change the contents in one window, all other windows containing the same document reflect those changes.   When you open a new window, it becomes the active window and is displayed on top of all other open windows.

Cascade
    Use this command to arrange multiple opened windows in an overlapped fashion.

Tile
    Use this command to arrange multiple opened windows in a non-overlapped fashion.

Arrange Icons
    Use this command to arrange the icons for minimized windows at the bottom of the main window.   If there is an open document window at the bottom of the main window, then some or all of the icons may not be visible because they will be underneath this document window.

Windows 1,2..
    VTT displays a list of currently open document windows at the bottom of the Window menu.   A check mark appears in front of the document name of the active window.   Choose a document from this list to make its window active.

Help Menu

The Help menu offers the following commands, which provide you assistance with this application:

**Help Topics**

 Use this command to display the opening screen of Help.   From the opening screen, you can jump to step-by-step instructions for using VTT and various types of reference information.

 Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

About

 Use this command to display the copyright notice and version number for VTT.

The Mixer Panel
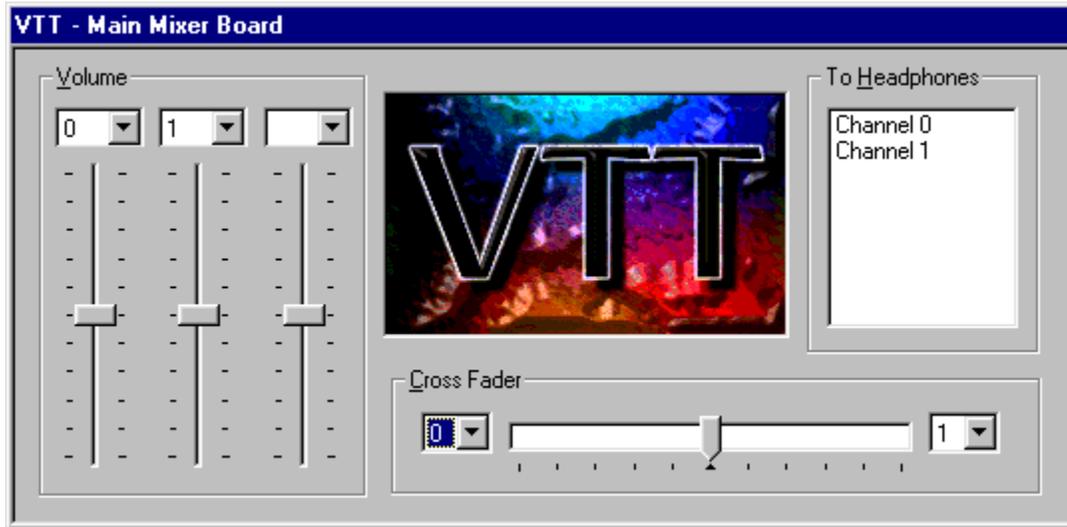
To get help on an item, click that item on the picture above or select from the following categories:

Volume
Cross Fader
To Headphones

Volume
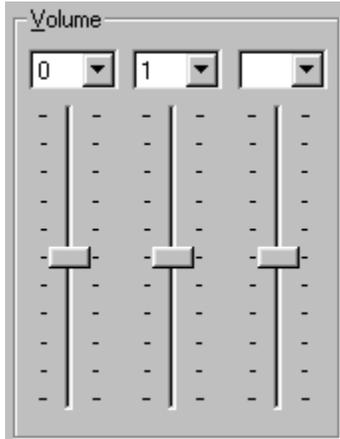
Each volume slider is associated with a device's channel, as specified by the number above the slider. You can change the associate channel by simply click on the box above the slider, and selecting a new one.

For more information, read <u>Step 4b: Using the Volume Controls</u>

Cross Fader
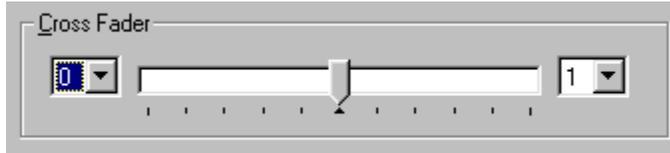
The crossfader controls which channels are heard through the main output speakers.

- When the fader is in the middle, both channels can be heard
- As the fader gets farther to one side, the channel associated with the OTHER side gets softer.
  i.e. If the fader was halfway to the left, channel 0 would be heard at full volume, and channel 1 would be soft

For more information, read Step 4a: Using the Fader

To Headphones

To Headphones controls which channels can be heard through the headphones.

- If a channel is selected, it CAN be heard through the headphones
- If a channel is NOT selected, it CANNOT be heard through the headphones

For more information, read <u>Step 4c: Using the headphone controls</u>

The Device Panel
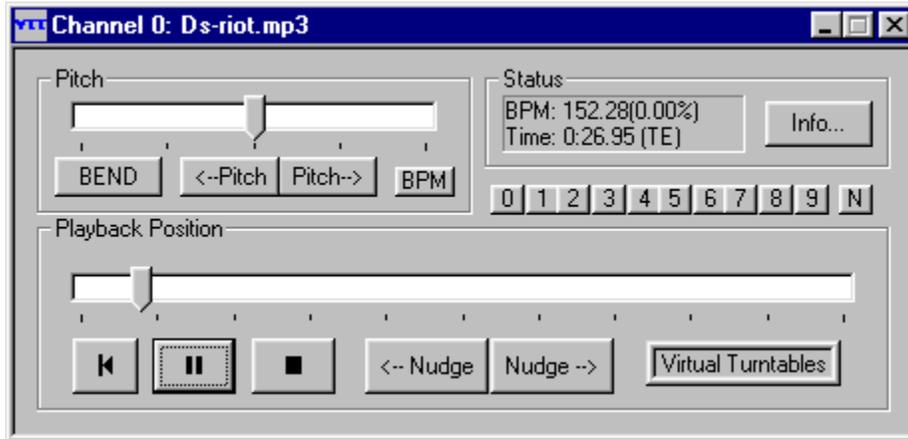
To get help on an item, click that item on the picture above or select from the following categories:

[Pitch](#)
[Status](#)
[Stored Positions](#) (the little numbers below status)
[Playback](#)

Pitch
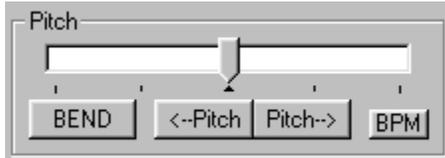
Main pitch control

The main pitch controller lets you control the pitch of the current device.

- To **speed up**, slide the controller to the **right**
- To **slow down**, slide the control to the **left**

The current pitch change % can be viewed in the status window.   You can change the pitch +/- 10% of the original pitch.

Bend button

When this button is depressed, the pitch control will ALWAYS return back to its original position when you release the mouse button.   So, for instance, if you clicked bend when the pitch was at +1.5%, and you move the pitch bar up to +7%, then release the mouse button, the pitch control will return back to +1.5%.

Low/High buttons

BEND BUTTON UP: When the bend button is NOT depressed, these two buttons give you fine control over the pitch.   Click them accordingly whether you'd like to make the song a little higher, or a little lower.   Typically, this increases/decreases the pitch by 0.04%

BEND BUTTON DOWN: When the bend button IS depressed, these two buttons increase the pitch by +/-5.00%.   When you initially press one of the pitch buttons, the song is appropriatetly sped up or down.   When you release the button, the song will return to its normal   speed.

BPM

Click this button to enter the BPM matching/counting windows.
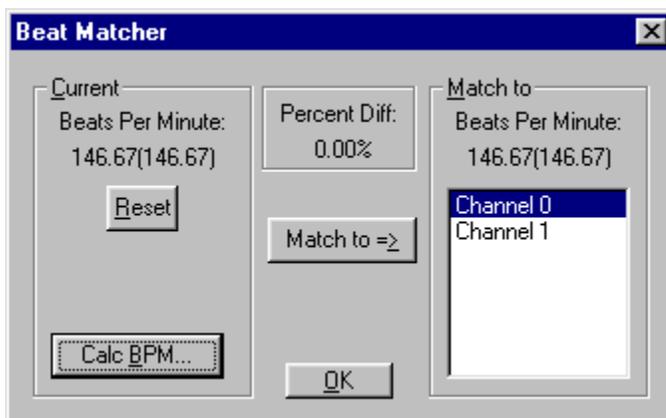
Current

The current area gives you the current devices BPM, with the original BPM (before any pitch changes) in parentheses.

- To **reset the device's BPM back to 100%**, click on reset
- To **calculate the devices BPM**, click on Calc BPM.   Refer to <u>Step 6: Beat Counting</u> for more information

<u>Match to buttons</u>
These set of buttons allow you to match BPMs

- To **match the current devices BPM** to the one selected in the "Match to" window, click on Match to =>
- If Percent Diff does NOT go to 0%, click Match to => again

<u>Match to</u>
The "match to" area gives information on other devices, in which you may wish to match this device to.

- Click the channel in the window in order to select that channel and view its BPM info
- To **make this device have the same BPM as the selected**, click on Match to =>

For more general information, refer to <u>Step 6: Pitch Matching</u>

Status

```
┌ Status ─────────────────────────────┐
│ ┌─────────────────────┐             │
│ │ BPM: 131.97(0.00%)  │  ┌────────┐ │
│ │ Time: 0:00.00       │  │ Info...│ │
│ └─────────────────────┘  └────────┘ │
└─────────────────────────────────────┘
```
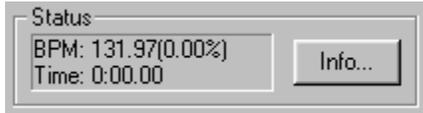
BPM
This tells you the current device's BPM.   The number is parentheses is the current pitch change over(or below) the original pitch.

### Time
This tells you how far into the song you are in the format mm:ss.ms.   If you'd like to see the time remaining, click on the time.

Info
Clicking this button brings up any information you have on this device.   Any information you type into this area is SAVED along with the device's BPM count.

Stored Positions

`0 1 2 3 4 5 6 7 8 9 N`

Basic storage

These buttons help you save and restore specific positions within a song.

- To **save a position**, hold down CTRL and click a number.   If there was any position in there previously, it is erased
- To **load a position**, just click on that number.   It loads!
- To **delete a position**, hold down SHIFT and click a number.

These positions are saved each time you close a device, and loaded each time you reload a device.
Cool huh?

Looping

In order to loop, you use the same method as above (use of CTRL and SHIFT) except you use BOTH the left and right mouse button.

- To **mark the beginning of a loop**, use the left mouse button
- To **mark the end of a loop**, use the right mouse button

If you've done it correctly, you should see a blue "selection" tag between the two loop points.   And the song should loop between the two points.

- If you'd like to **deselect a looping region**, click on the N button

Playback

Playback Position

| K | ▶ | ■ | <--Nudge | Nudge--> | Virtual Turntables |
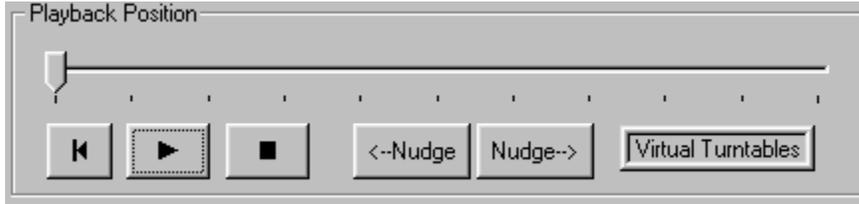
Main position slider

This slider tells you the current device's position and lets you set the current position as well.

- To change position, click on the little wedge shaped thingy, and drag to the desired position

Playback control

These three buttons control playback

Cross Fader

| 0 ▼ | [slider] | 1 ▼ |
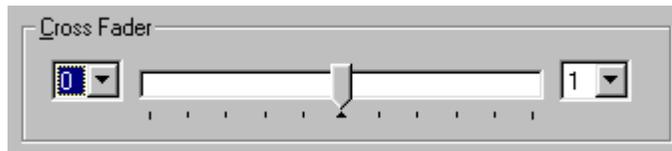
- To **start playing** click

Cross Fader

| 0 ▼ | [slider] | 1 ▼ |
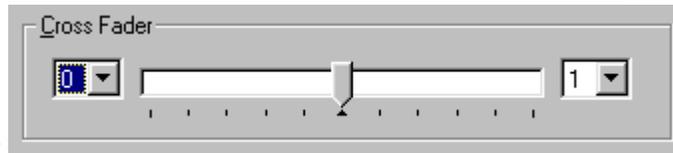
- To **pause playing** click
- To **stop playing and reset the position to the beginning** of the song click

Cross Fader

| 0 ▼ | [slider] | 1 ▼ |

- To **reset the position to the beginning of the song WITHOUT stopping** click

Cross Fader

| 0 ▼ | [slider] | 1 ▼ |
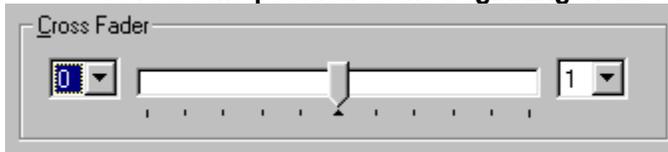
Nudge buttons

These nudge buttons shift the position of the device very slightly.   Use these to make slight adjustments to the position.   In order for them to be effective, though, you need a pretty fast computer.

Obtaining DirectX

To obtain DirectX point your web bowers here:
http://www.microsoft.com/msdownload/directx/dxf/enduser5.0/default.htm

If this site doesn't work go to:
http://www.microsoft.com

And look for information pertaining to DirectX

From there, install DirectX Version 5.0 or greater and you're on your way!

What is an Audio doohicky?   Why do I need one?

What

The Audio doohicky (AD) is small device that looks like this

If you wish to harness the full power of VTT, one of these is required.   It allows you to set up two distinct output channels.   One channel goes to the speakers, and the other, to your headphones for monitoring purposes.

Click here to learn how to build one of these yourself.   If you don't want to bother with that, click here for information on ordering.

Why

When mixing songs, most DJs like to que up their next song before the previous song is done playing.   In this manner, the current song can continue to play over the loud speakers, while the DJ previews the next song over his headphones.   Previewing allows the DJ to correctly pitch match, set up volumes, and most importantly of all, look for good entry points.

In order to accomplish this same effect WITHOUT two sound cards (which I don't think would work at all) VTT uses the left and right channels of a stereo output.

VTT sends all data that SHOULD GO TO THE SPEAKERS to the left channel, and all the HEADPHONE DATA to the right channel.

What the AD does is split the stereo signal coming from your sound card into these left and right channels.   By hooking your speakers to the left channel, and your headphones to your right, you too can que up songs for preview without interfering with your speaker output.

Connecting your Audio doohicky

To connect your audio doohicky, follow the following diagram:

To Speakers
(Left channel)

To Headphones
(Right channel)
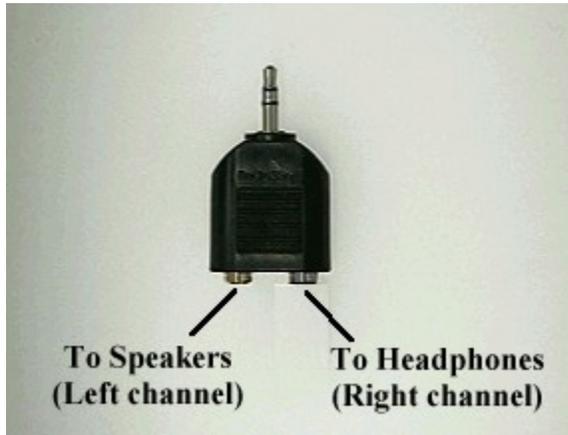
If you find you're not hearing anything through your speakers, but everything through your headphones, switch the two...   You probably have them backward.

Building an Audio doohicky

The Audio doohicky
An Audio doohicky is composed of nothing more than a channel splitter.   This is listed under most catalogs as a "stereo channel splitter".   Essentially all it does is split up a STEREO signal into MONO left and right channels.

At Radioshack this is part #274-375B

Extra stuff
If, when you connect your speakers to the left channel, you get sound out of only one speaker, you need to buy a mono->stereo converter.   It looks like this

At Radioshack this is part #274-368C

Ordering your Audio doohicky

If you don't want to build an Audio Doohicky (trust me, it's really easy!) you can buy one from me for $18.00.   This includes the splitter, as well as 2 mono->stereo converters you might need.

To order your Audio doohicky, please follow the directions for registering located <u>here</u>.

Ordering VTT

What are the benefits of REGISTERING?

- A Completely UNLOCKED Version of VTT.   Not only does this mean an UNLIMITED amount of mixing time, but also NO MORE NAG SCREENS!
- Free bug fixes/updates to VTT
- Free technical support via email
- My NEVER NEVER NEVER ending gratitude.

Products offered

Virtual Turntables Registered
- Completely unlocked!   No time limits, and no more nag screens!
- ***Registration Fee - $37.00***

Audio Doohicky
- Required to get the best usage out of VTT
- Includes a splitter, as well as 2 Mono->Stereo converters
- ***Cost - $15.00***

How Do I Make a Purchase?

CREDIT CARD ORDERS ONLY

You can order with *MC, Visa, Amex, or Discover* through Public Software Library, Inc. in the following ways:

- **Online:** Go to our Web site at ***http://hops.cs.jhu.edu/~gonzo/carrot*** and click on "Order Online".

- **FAX:** To 713-524-6398...   Ask for product ***#378574*** and please type or block print very plainly.

- **Email:** To PsL at "***378574@pslweb.com***"

- **Mail:** Mail credit card orders to ***PsL at P.O.Box 35705, Houston, TX 77235-5705***.

THE ABOVE NUMBERS ARE FOR CREDIT CARD ORDERS ONLY.
THE AUTHOR OF THIS PROGRAM CANNOT BE REACHED AT THESE NUMBERS.

Any questions about the status of the shipment of the order, refunds, registration options, product details, technical support, volume discounts, dealer pricing, site licenses, non-credit card orders, etc, must be directed to Jeff Lee at the email addresses listed here.

To insure that you get the latest version, PsL will notify us within one business day of your order and we will ship the product or email the code directly to you.

CHECK OR MONEY ORDER

If you'd like to order with a check or money order, you need to print out an order form.   Simply fill it out, and send it to the address given on the order form!

OTHER

If none of the above options are available to you, feel free to contact the author.

What Happens When I Register?

Once your order is confirmed, you will be contacted via EMAIL and given a unique "Unlock" code.   From there, you simply load up VTT, and click the REGISTER menu item, and enter your codes.   You then have a fully unlocked version of VTT!

Order Form

ORDER FORM FOR CARROT UTILITIES/GAMES SHAREWARE:

Name: _____

Addresses: _____

_____

Province/State _____ Post/Zip code _____

Country _____

Day phone _____ Fax Phone _____

Where did you obtain your copy: _____ Version: _____

Send to me by: (   ) Email   (   ) I prefer hard copy
Payment: (   )Check (**make out to Jeff Lee**)   (   ) Money Order

Outside of U.S.   (   ) Money Order or Cashier Check   drawn from U.S. banks ONLY
                (   ) Cash (not a good idea, but it has been done)

If you'd like to order by credit card, please visit the Carrot Innovations web site at:
http://hops.cs.jhu.edu/~gonzo/carrot

I like to order the following Carrot Utilities/Games products:
[   ]   **Virtual Turntables**   *$32.00*
[   ]   **Autographed Disk =)**   *$02.00*
[   ]   **Audio Doohicky** (includes splitter, and 2 mono->stereo adaptors) *$18.00*

TOTAL: _____

Please allow 2-4 weeks for delivery if you are NOT receiving your code via email.

WE RESERVE THE RIGHTS TO REFUSE SERVICE TO ANYONE .

Send check or money order to:
Carrot Innovations
15284 Karl Ave
Monte Sereno, CA 95030

PLEASE FILL OUT THE ADDRESS LABEL BELOW TO ENSURE TIMELY SERVICE

*****************ADDRESS LABEL**************

Name
Address
City, State,Zip
Country

FAQ/Q&A

Q: I'm getting an error message "Cannot Initialize Secondary Sound Buffer"
A: You probably do not have DirectX Version 5. You can check by clicking the START BUTTON, selecting SETTINGS, selecting CONTROL PANEL. If you see a directX Icon there, you have DirectX 5. If you don't, you probably do not. You can download the latest DirectX from:
http://www.microsoft.com/msdownload/directx/dxf/enduser5.0/default.htm

Q: I'm getting an error message "Unable to find file MSVCRT.DLL" or "Unable to find file MFC42.DLL"
A: This file should be included in the new install.   This problem is usually corrected by entering your Windows\System directory and deleting the file MFC42.DLL or MSVCRT.DLL.   Then, reinstall VTT. Also, be sure these files do NOT reside in your Windows directory (as opposed to your windows\system directory)

Q: I'm getting the error message "Error: -3953"
A: This varies from computer to computer.   Please <u>contact</u> the author with more information about your system.

Q: What is an Audio Doohicky?
A: The Audio Doohicky is a small device that lets you have both a feed to a pair of headphones (for previewing) and a feed to a pair of speakers. They operate independently of each other, so you can, for instance, be previewing a song on the headphones while a different song is playing on the speakers. The help file contains a more detailed description as well as usage tips.

Q: I'm getting a "data move error (-155)" during the installation process. What's wrong?
A: This was only a problem with Version 1.0.   You should not have this problem with Version 1.1

Contacting the author

If you have any questions, or would like to report bugs, please contact me at the following email:

VTTSupport@aol.com

Please remember to visit the web site often.   Here, you will find the newest VTT news, as well as bug fixes and patches.

http://carrot.prohosting.com

or

http://hops.cs.jhu.edu/~gonzo/carrot (this page does not contain the actual homepage... it will always redirect you to the Carrot Innovations homepage in case it moves)

Copyright/License/Warranty

Virtual Turntables (VTT)® Copyright © 1997-1998 by Carrot Innovations
All rights reserved.

License Agreement

You should carefully read the following terms and conditions before using this software.   Unless you have a different license agreement signed by Carrot Innovations your use of this software indicates your acceptance of this license agreement and warranty.

For information on distributing the evaluation version of   VTT see the section titled Evaluation License.

Registered Version

One registered copy of   VTT may either be used by a single person who uses the software personally on one or more computers, or installed on a single workstation used non simultaneously by multiple people, but not both.

You may access the registered version of VTT through a network, provided that you have obtained individual licenses for the software covering all workstations that will access the software through the network.   For instance, if 8 different workstations will access   on the network, each workstation must have its own   license, regardless of whether they use VTT at different times or concurrently.

Governing Law

This agreement shall be governed by the laws of the State of California.

Disclaimer of Warranty

THIS SOFTWARE AND THE ACCOMPANYING FILES ARE SOLD "AS IS" AND WITHOUT WARRANTIES AS TO PERFORMANCE OR MERCHANTABILITY OR ANY OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED.   Because of the various hardware and software environments into which VTT may be put, NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS OFFERED.

Good data processing procedure dictates that any program be thoroughly tested with non-critical data before relying on it.   The user must assume the entire risk of using the program.   ANY LIABILITY OF THE SELLER WILL BE LIMITED EXCLUSIVELY TO PRODUCT REPLACEMENT OR REFUND OF PURCHASE PRICE.

Evaluation License

See the section titled <u>Copyright/License/Warranty</u> for the full license agreement.

Evaluation and Registration

Virtual Turntables (VTT) is not free software.   Subject to the terms below, you are hereby licensed to use this software (VTT) for evaluation purposes without charge for a period of 21 days.   If you use this software after the 21 day evaluation period a registration fee of $32 is required.   Payments must be in US dollars drawn on a US bank, and should be sent according to the instructions presented <u>here</u>.   Credit card ordering and quantity discounts are available, as described in the section <u>Ordering Information</u>. When payment is received you will be sent a registered copy of the latest version of VTT.

Unregistered use of VTT after the 21-day evaluation period is in violation of U.S. and international copyright laws.

Distribution

Provided that you verify that you are distributing the evaluation version (select About from the VTT Help menu to check, it will say UNREGISTERED if it is the evaluation version) you are hereby licensed to make as many copies of the evaluation version of this software and documentation as you wish; give exact copies of the original evaluation version to anyone; and distribute the evaluation version of the software and documentation in its unmodified form via electronic means.   There is no charge for any of the above.

You are specifically prohibited from charging, or requesting donations, for any such copies, however made; and from distributing the software and/or documentation with other products (commercial or otherwise) without prior written permission.

Legal uses of MP3s

The following is a copy of the NET act (No Electronic Theft) enacted by congress.   This document details the legality of MP3s, and its legal uses.   Please read it.

For more information on copyright issues, please go to these pages:
http://www.riaa.com/intprop/releases/treaty.htm
http://members.tripod.com/~Monstermo/netact.htm

NET ACT DOCUMENT
FILE h2265.ih
        HR 2265 IH
        105th CONGRESS
        1st Session
        To amend the provisions of titles 17 and 18, United States Code, to provide greater copyright protection by amending criminal copyright infringement provisions, and for other purposes.
                  IN THE HOUSE OF REPRESENTATIVES
                    July 25, 1997
        Mr. GOODLATTE (for himself, Mr. COBLE, Mr. FRANK of Massachusetts,
           and Mr. CANNON) introduced the following bill; which was
           referred to the Committee on the Judiciary
                    A BILL
        To amend the provisions of titles 17 and 18, United States Code, to provide greater copyright protection by amending criminal copyright infringement provisions, and for other purposes.
  [Italic->]   Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, [<-Italic]
SECTION 1. SHORT TITLE.
   This Act may be cited as the `No Electronic Theft (NET) Act'.
SEC. 2. CRIMINAL INFRINGEMENT OF COPYRIGHTS.
   (a) DEFINITION OF FINANCIAL GAIN- Section 101 of title 17, United States Code, is amended by inserting after the undesignated paragraph relating to the term `display', the following new paragraph:
      `The term `financial gain' includes receipt of anything of value, including the receipt of other copyrighted works.'.
   (b) CRIMINAL OFFENSES- Section 506(a) of title 17, United States Code, is amended to read as follows:
  `(a) CRIMINAL INFRINGEMENT- Any person who infringes a copyright willfully either--
     `(1) for purposes of commercial advantage or private financial gain; or
     `(2) by the reproduction or distribution, including by electronic means, of 1 or more copies, of 1 or more copyrighted works,
shall be punished as provided under section 2319 of title 18.'
   (c) LIMITATION ON CRIMINAL PROCEEDINGS- Section 507(a) of title 17, United States Code, is amended by striking `three' and inserting `5'.
   (d) CRIMINAL INFRINGEMENT OF A COPYRIGHT- Section 2319 of title 18, United States Code, is amended--
      (1) in subsection (b)--

(A) in the matter preceding paragraph (1), by striking
`subsection (a) of this section' and inserting `section
506(a)(1) of title 17'; and
(B) in paragraph (1)--
(i) by inserting `including by electronic means,'
after `if the offense consists of the reproduction or
distribution,';
(ii) by striking `with a retail value of more than
$2,500' and inserting `which have a total retail value
of more than $5,000'; and
(iii) by adding `and' at the end; and
(2) by redesignating subsection (c) as subsection (e) and
inserting after subsection (b) the following:
`(c) Any person who commits an offense under section 506(a)(2) of
title 17--
`(1) shall be imprisoned not more than 3 years, or fined in
the amount set forth in this title, or both, if the offense
consists of the reproduction or distribution, including by
electronic means, during any 180-day period, of 10 or more
copies of 1 or more copyrighted works, which have a total
retail value of more than $5,000;
`(2) shall be imprisoned not more than 6 years, or fined in
the amount set forth in this title, or both, if the offense is
a second or subsequent offense under paragraph (1); and
`(3) shall be imprisoned not more than 1 year, or fined in
the amount set forth in this title, or both, in any other case.
`(d)(1) During preparation of the presentence report pursuant to
Rule 32(c) of the Federal Rules of Criminal Procedure, victims of
the offense shall be permitted to submit, and the probation officer
shall receive, a victim impact statement that identifies the victim
of the offense and the extent and scope of the injury and loss
suffered by the victim, including the estimated economic impact of
the offense on that victim.
`(2) Persons permitted to submit victim impact statements shall
include--
`(A) producers and sellers of legitimate works affected by
conduct involved in the offense;
`(B) holders of intellectual property rights in such works; and
`(C) the legal representatives of such producers, sellers,
and holders.'.
(e) UNAUTHORIZED FIXATION AND TRAFFICKING OF LIVE MUSICAL
PERFORMANCES- Section 2319A of title 18, United States Code, is
amended--
(1) by redesignating subsections (d) and (e) as subsections
(e) and (f), respectively; and
(2) by inserting after subsection (c) the following:
`(d) VICTIM IMPACT STATEMENT- (1) During preparation of the
presentence report pursuant to Rule 32(c) of the Federal Rules of
Criminal Procedure, victims of the offense shall be permitted to
submit, and the probation officer shall receive, a victim impact
statement that identifies the victim of the offense and the extent
and scope of the injury and loss suffered by the victim, including
the estimated economic impact of the offense on that victim.
`(2) Persons permitted to submit victim impact statements shall
include--
`(A) producers and sellers of legitimate works affected by

conduct involved in the offense;

    `(B) holders of intellectual property rights in such works; and

    `(C) the legal representatives of such producers, sellers, and holders.'.

  (f) TRAFFICKING IN COUNTERFEIT GOODS OR SERVICES- Section 2320 of title 18, United States Code, is amended--

    (1) by redesignating subsections (d) and (e) as subsections (e) and (f), respectively; and

    (2) by inserting after subsection (c) the following:

  `(d)(1) During preparation of the presentence report pursuant to Rule 32(c) of the Federal Rules of Criminal Procedure, victims of the offense shall be permitted to submit, and the probation officer shall receive, a victim impact statement that identifies the victim of the offense and the extent and scope of the injury and loss suffered by the victim, including the estimated economic impact of the offense on that victim.

  `(2) Persons permitted to submit victim impact statements shall include--

    `(A) producers and sellers of legitimate goods or services affected by conduct involved in the offense;

    `(B) holders of intellectual property rights in such goods or services; and

    `(C) the legal representatives of such producers, sellers, and holders.'.

  (g) DIRECTIVE TO SENTENCING COMMISSION- (1) Under the authority of the Sentencing Reform Act of 1984 (Public Law 98-473; 98 Stat. 1987) and section 21 of the Sentencing Act of 1987 (Public Law 100-182; 101 Stat. 1271; 18 U.S.C. 994 note) (including the authority to amend the sentencing guidelines and policy statements), the United States Sentencing Commission shall ensure that the applicable guideline range for a defendant convicted of a crime against intellectual property (including offenses set forth at section 506(a) of title 17, United States Code, and sections 2319, 2319A, and 2320 of title 18, United States Code) is sufficiently stringent to deter such a crime and to adequately reflect the additional considerations set forth in paragraph (2) of this subsection.

  (2) In implementing paragraph (1), the Sentencing Commission shall ensure that the guidelines provide for consideration of the retail value and quantity of the items with respect to which the crime against intellectual property was committed.

About Carrot Innovations

A little history (Read it... It's pretty funny)
Carrot Innovations, previously known as Carrot Utilities is based in Los Gatos, CA, smack dab in the Silicon Valley.   Nope, we're not publicly available yet, but we will someday...

It was started back in 1992 with the one employee... A 13 year old 8th grader who wanted to write games.   Inspired by the adventure games of Sierra Online, this 13 year old set out to learn C++, and be the youngest kid ever to make a kick ass game.   And what was this game about?   A little rabbit named Fuzzy who set out to find his stolen carrots   (so I... I mean he was sort of a freak ass 13 year old).   Unfortunately, this failed miserably

Then, out came the revolutionary game DOOM by ID software (great game by the way).   Browsing the Internet one day, I (ok, I was the 13 year old kid, i admit it) came across specs for DOOMs .wad file format.   Since there were no level editors around at that point, I set out to make one myself.   The final product was a little program called DTEDIT which was released as freeware.   Unfortunately, I got grounded (I was unable to use my computer for a LONG time), and was unable to continue my work.   On being released from my grounding, a new editor, I think it was DEU or something like that, had surpassed and totally wiped out my program (ah well, no hard feelings)

Next came the introduction of the shareware utilities UUD, UUE, and InterCode for Windows.   Unlike my other products, these actually SOLD.   A major milestone in Carrot Innovations short history, for finally, we made MONEY!   This lasted about 2 years or so, until Microsoft and Netscape came in and introduced my program's functionality into their software. =(But in any case, this was definitely an ego booster for me.   It proved to me that there really are honest people out there who will pay for their shareware!   Of course, there are the others who prefer to crack stuff (there's actually a crack for my proggie...   I'm actually kinda proud of that)

In any case, now, 4 years later, Carrot Innovations has grown.   With about five employees, Carrot Innovations is going strong.   We now have an 19 year old College student (that's me), a full time shipping department (my sister), and a part time graphics designer (my bud from LA).   We also have an official DJ (my other bud from LA) and a body guard (he's at the Naval Academy).   Anyway, more about this in the credits. =)

Well, there's Carrot Innovations history for ya.   Enjoy VTT and PLEASE register!

Credits

Production
Produced and programmed:
Jeff Lee

MP3 decoding engine:
XAudio engine

Original skin design
Niklas Åberg

Design and graphics:
Charlton Yu

Sample songs (DS-ALOOF & DS-RIOT):
Chuck "Dead Soul" Cho

Web master
Tom Chen

Quality Assurance (testing):
Tom Chen
Beverly Tang
Edric Yamamoto
Charlton Yu (Ok, so it never worked on your computer... you just have a strange computer)

Support staff
Technical support and Sales:
Mom (Susan) Lee

Financial backing (heh):
Dad (Jeff) Lee

Packaging and Shipping:
Sister (Kathryn) Lee

Marketing:
Tom Chen

Fun Credits

Well, here's my favorite section (and the easiest to write), the fun section.   This section is just full of inside jokes, and random comments about friends/foes/pets/Anna.   Don't take me seriously on anything, and if you're not included, don't feel bad, consider yourself lucky.

Marketing
Marketing and Microeconomics:
Anna "Bowed in PPF" Lui - JHU '00
Christina "Psicop" Chang - JHU '99

Ghetto marketing advisor:
Angelo "that's ghetto" Vasquez - UCR '00

Legal counsel
General:
Eva "McNugget skin stripper" Chan - JHU '00
Kathryn "cat" Lee - ??? '??

Medical counsel
Brain surgeon:
Wah "Steve" Leung, PhD - JHU Med School '00

Nurses:
Joe "Quicksilver" DeVera - UOP '00
Andrew "Mr. BME" Yue - JHU '00

Medical student:
Eric "Neuroscience" Huang - Somewhere Med School '04

12th year Medical student:
Anna "Orgo" Lui - Carrot Med School '????

Biomedical department:
Jerome "Aritifical Hip" Dunn - JHU '00

Security
Personal bodyguards:
Vince "Yes Sir" Fonte - Naval Academy '00
Amy "Sir, yes sir...   yes... sir, yes sir, sir..." Chiu - JHU '00
Christian "..." Mercado - USF '00
Christina "Don't make me wipe your mind" Cheng '99

They protect me from:
Eugene "Tara" Oh - JHU '00
Anna "Balboa" Lui - JHU '00
Legal counsel

Company entertainment
Company DJs:
Tom "DJ Extrodinaire" Chen - UCLA '00
Charlton "Chuck" Yu - UCLA '00
Beverly "Lady Bitch" Tang - Stanford ' 01

Dance squad:

Edric "Cedric" Yamamoto - UCD '00
Susan "Tetris Attack" Chimerinski (sp? heh) - JHU '00

Physical trainers (you guys got it easy):
Derrick "I LOVE SWEAT" Pau - JHU '00
Victor "I LOVE SWEAT... Wait... no I don't" Lee - JHU '00
Vince "I LOVE PAIN" Fonte - Naval Academy '00
Karwai "u+4,1,2,(1+2),1,3,4,4,4,1" Ng - JHU '00

Dolphin tank caretaker:
Victor "Ohhhh... Pretty fishy" Lee - JHU '00
Joe "Rain maker" DeVera - JHU '00

Mascot:
Bev "Bitch (no Lady)" Tang - Stanford '01

Pimp:
Howard "Astroturf" Jen - JHU '01

Dining services
Hot dog getter:
Eric "You want one?   I can get one!" Huang - JHU '00

Hot dog eater (and just about everything else):
Andrew "You gonna eat that?" Yue - JHU '00

Just plain eater:
Ina "I'm SOOOOOO HUUNNGGRRYYYY..." Kim - Pomona '01

Quake Team
Quake 1 - DM3
All Blacks
Gonzo
Lore
Pacman
Saiden
Saidar
Terminator

Quake II (LOSERS)
Dan "The Man" Manheim
Tom "Railgun" Chen

File Open - Basic

Your standard open dialog box.   Here, you can select what file you'd like to load.   Click on the "Filter" box (currently says MP3 Device) to change the types of files shown

File Open - Extended

This area displays information about the current file.   BPM is the songs Beats Per Minute.   Any notes associated with this file are shown in the "notes" area.